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## REMARKS

Favorable reconsideration of this application is respectfully requested in view of the claim amendments and following remarks. Currently, claims 1-4, 6, 7-20, 22, 25, 26, 28 and 29 are pending in the present application of which claims 1, 14, and 19 are independent.

No new matter has been introduced by way of the claim amendments; entry thereof is therefore respectfully requested.

Claims 14-20 and 26 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Ankireddipally et al.(U.S. Patent Number 6,772,216).

Claims 1-4, 6, 8 and 9-11 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ankireddipally et al. in view of Delong (U.S. Patent Number 6,247,169).

Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ankireddipally et al. in view of Delong in further view of Layman ("XML Schema NG Guide", Microsoft, May 1999).

Claims 21-25 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ankireddipally et al. in view of Delong as applied to claims 19 and 20 above in further view of Layman.

It is noted that the rejection of claim 21-25 is incorrect, because claims 19 and 20 were not rejected over Ankireddipally et al. in view of Delong. Instead, claims 19 and 20 appear to have been rejected as being anticipated by Ankireddipally et al. Thus, it is unclear whether claims 19 and 20 were meant to be rejected under 103 over Ankireddipally et al. in view of Delong or as being anticipated by over Ankireddipally et al under 102. Furthermore, it is unclear whether claims 21-25 are being rejected over Ankireddipally et al. in view of

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Delong as applied to claims 19 and 20 above in further view of Layman or whether claims

21-25 are being rejected over Ankireddipally et al. in view of Layman.

The above rejections are respectfully traversed for at least the reasons set forth below.


*Examiner Interview Conducted*

Applicants wish to thank Examiner Serrao and Primary Examiner Kang for granting

the examiner interview conducted on October 17, 2005. Amending the independent claims to

include a remote registry storing customized description files was discussed. As agreed upon

in the interview, Ankireddipally et al. discloses predetermined message types that are not

customized for a particular service. Furthermore, the description files describing customized

sequences of interactions for communicating with an entity to utilize a service, which are

described in the embodiments of the Applicants' specification, are distinguishable from XML

documents used in the prior art, because the XML documents do not describe customized

sequences of interactions or customized patterns of message exchanges. Furthermore, a

registry storing multiple description files customized for different services is not disclosed in

the prior art. The conversation description language described in the embodiments of the

Applicants' specification is used to program customized description files for different

services and provides the flexibility for programming description files for different services.


*Discussion of Embodiments Described in Applicants' Specification*

According to an embodiment, a conversation description language (CDL) is provided

that enables services provided by different entities to engage in flexible and autonomous

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interactions. A conversation includes a sequence of exchanges of documents, such as XML documents, between entities.

A CDL description file includes the sequence of interactions (e.g., transmitting and/or receiving messages) between entities and the XML document types that may be used in each interaction. Each CDL description file describes a conversation which may include a pattern of message exchanges expected to be followed and documents types expected to be used to utilize the service. Each description file may be customized for a particular service. See pages 4-5.

A CDL programmer may create a CDL description file for a conversation, and publish it in a registry. Thus, a CDL description file for a particular service may include a description of a sequence of interactions that are customized for that service. See page 5, lines 16-20. The sequence of interactions may be different for each service depending on the description in the CDL description file.

Fig. 1 illustrates an exemplary embodiment of a web service provider 100 employing principles of an embodiment of the invention. The web service provider 100 may publish a CDL description file 110 in a remote registry, such as a registry 210 (shown in Fig. 2), storing CDL description files defining conversations for multiple service providers. Other web service providers and customers may retrieve the CDL description file 110 from the registry, because the CDL description file 110 defines a conversation for interacting with the web service provider 100 to facilitate business-to-business transactions and customer-to-business transactions with the web service provider 100.

According to an embodiment, a web service provider that desires to conduct business with another service retrieves the CDL description file from the registry for that service. In

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an alternative embodiment, the description files are already stored on the computer and the

registry is accessed and searched to retrieve an identification of a description file already

stored on the computer that corresponds with a desired service. Then, that description file is

used to engage the desired service. In yet another embodiment, the registry is accessed to

retrieve a location of description file, such as a URL, corresponding to a desired service. See

page 6, lines 1-9 and page 6, line 30-page 7, line 24.

     A conversation controller is generated from the description file. In one embodiment,

the web service provider may compile the CDL description file to generate a conversation

controller 120 (e.g., an executable computer program). The conversation controller 120 may

transmit and receive XML documents 130 and generate error messages based on the CDL

description file 110. Thus, the conversation controller may be generated from the CDL

description file. More than one conversation controller may be generated, for example, to

communicate with different services described by different CDL description files.

     Each interaction definition may also include the ability to select one document from a

set of incoming or outgoing documents. For example, a receive interaction may receive a

document from a set of document types, and a send interaction can be defined to send a

document from a set of document types. Therefore, an interaction definition may include

several inbound or outbound document types.

     An interaction is executed in response to receiving an instance of document type

specified in the interaction. See page 8, lines 15-20 and pages 12-14. The program

interpreting a CDL specification is expected to generate automatically an error message in

response to receiving a document not in an interaction definition. For example, the receive

interaction PO expects to receive the PurchaseOrderRQ XML document. If a document of

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different type (i.e., a document type other than described by the schema in

PurchaseOrderRQ.xsd) is received, then an error message is generated. Therefore, the

existing non-CDL code for a web service does not need to include error detection for

detecting documents of the wrong type. Also, error messages corresponding to particular

errors may be generated by using exception transitions coded with CDL, described in detail

below.

CDL includes error detection for detecting documents of incorrect types. Therefore,

the service provider does not need to code this type of error detection into the service and

does not need to perform the service for each interaction. This is a significant cost and time

savings for the service provider.


*Claim Rejection Under 35 U.S.C. §102*

The test for determining if a reference anticipates a claim, for purposes of a rejection

under 35 U.S.C. § 102, is whether the reference discloses all the elements of the claimed

combination, or the mechanical equivalents thereof functioning in substantially the same way

to produce substantially the same results. As noted by the Court of Appeals for the Federal

Circuit in *Lindemann Maschinenfabrick GmbH v. American Hoist and Derrick Co.*, 221

USPQ 481, 485 (Fed. Cir. 1984), in evaluating the sufficiency of an anticipation rejection

under 35 U.S.C. § 102, the Court stated:

> Anticipation requires the presence in a single prior art reference
> disclosure of each and every element of the claimed invention,
> arranged as in the claim.

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Therefore, if the cited reference does not disclose each and every element of the claimed

invention, then the cited reference fails to anticipate the claimed invention and, thus, the

claimed invention is distinguishable over the cited reference.

Claims 14-20 and 26 were rejected under 35 U.S.C. § 102(e) as allegedly being

anticipated by Ankireddipally et al.

Independent claim 14 recites,

> a registry storing a list of description files, each description file being
> customized for a particular service provided by a computer and describes a
> pattern of message exchanges expected to be followed and documents types
> expected to be used for communicating with the computer providing the
> service to utilize the service.

Independent claim 19 recites similar features. As discussed in the interview,

Ankireddipally et al. fails to teach the registry.

In addition claim 14 recites,

> access a registry ...;
> identify the description file from the list of description files
> corresponding to a desired service; and
> retrieve an identification of the description file, a location of the
> description file or the description file from the registry.

Claim 19 recites, "access the registry; and publish a description file in the registry".

None of these features are taught by Ankireddipally et al.

In addition, claim 14 recites,

> wherein said conversation controller is operable to determine whether
> a document is an instance of a document type for an interaction of said
> interactions and is operable to execute the interaction in response to the
> document being the instance of the document type for the interaction.

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Ankireddipally et al. fails to teach determining whether a document is an instance of a

document type in order to execute an interaction. For at least these reasons, claims 14-20, 22,

25 and 26 are believed to be allowable.


*Claim Rejection Under 35 U.S.C. §103*

The test for determining if a claim is rendered obvious by one or more references for

purposes of a rejection under 35 U.S.C. § 103 is set forth in MPEP § 706.02(j):

> To establish a *prima facie* case of obviousness, three basic criteria
> must be met. First, there must be some suggestion or motivation,
> either in the references themselves or in the knowledge generally
> available to one of ordinary skill in the art, to modify the reference
> or to combine reference teachings. Second, there must be a
> reasonable expectation of success. Finally, the prior art reference
> (or references when combined) must teach or suggest all the claim
> limitations. The teaching or suggestion to make the claimed
> combination and the reasonable expectation of success must both
> be found in the prior art and not based on applicant's disclosure. *In
> re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Therefore, if the above-identified criteria are not met, then the cited reference(s) fails

to render obvious the claimed invention and, thus, the claimed invention is distinguishable

over the cited reference(s).

Claims 1-4, 6, 8 and 9-11 were rejected under 35 U.S.C. § 103(a) as allegedly being

unpatentable over Ankireddipally et al. in view of Delong (U.S. Patent Number 6,247,169).

Claim 1 has been amended to recite

> accessing a registry storing a list of description files, each description
> file being customized for a particular service provided by a computer and
> describes a pattern of message exchanges expected to be followed and
> documents types expected to be used for communicating with the computer
> providing the service to utilize the service; ...
> identifying a description file from the list of description files
> corresponding to a desired service;

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        retrieving an identification of the description file, a location of the description file or the description file from the registry, ...
        determining whether a document is an instance of the document type to be used in the source interaction; and
        executing the source interaction in response to the document being an instance of the document type.

None of these features are taught or suggested by the cited prior art. Accordingly, claims 1-4, 6 and 7-13 are believed to be allowable.

Claims 12 and 13 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ankireddipally et al. in view of Delong in further view of Layman ("XML Schema NG Guide", Microsoft, May 1999).

Claim 12 and 13 are believed to be allowable for at least the reasons claim 1 is believed to be allowable.

Claims 21-25 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ankireddipally et al. in view of Delong as applied to claims 19 and 20 above in further view of Layman.

Claims 22 and 25 are believed to be allowable for at least the reasons claim 19 is believed to be allowable. Claims 21 and 23-24 are canceled.

### *Newly Added Claims*

Claims 28 and 29 are new and include features directed towards generating an error message in response to a document not being the instance of a document type. These features are not taught or suggested by the prior art.

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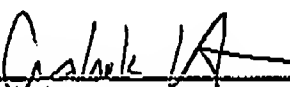
*Conclusion*

In light of the foregoing, withdrawal of the rejections of record and allowance of this

application are earnestly solicited.

Should the Examiner believe that a telephone conference with the undersigned would

assist in resolving any issues pertaining to the allowability of the above-identified

application, please contact the undersigned at the telephone number listed below. Please

grant any required extensions of time and charge any fees due in connection with this request

to deposit account no. 08-2025.

                                        Respectfully submitted,

Dated: October 27, 2005          By    _____
                                        Ashok K. Mannava
                                        Registration No.: 45,301

                                        MANNAVA & KANG, P.C.
                                        8221 Old Courthouse Road
                                        Suite 104
                                        Vienna, VA 22182
                                        (703) 652-3822
                                        (703) 880-5270  (facsimile)

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